UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

DATE: DEC 2 1 2017

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Continental Tire, Mount Vernon, Illinois

FROM: Muhammed Shuaibi, Environmental Engineer
AECAB (IL/IN)

THRU: Nathan Frank, Section Chief
AECAB (IL/IN)

TO: File

BASIC INFORMATION

Facility Name: Continental Tire

Facility Location: 11525 N. Illinois Hwy 142, Mount Vernon, Illinois

Date of Inspection: December 04, 2017

EPA Inspector(s):
1. Muhammed Shuaibi, Environmental Engineer
2. Dakota Prentice, Environmental Engineer
3. Victoria Nelson, Environmental Engineer

Other Attendees
1. Scott Cravens, ESH Manager, Continental Tire
2. Paul Evilsizer, Environmental Manager, Continental Tire
3. Johannes Mack, Environmental Specialist, Continental Tire

Purpose of Inspection: To ensure Continental Tire is in compliance with its Title V Permit.

Facility Type: Tire Manufacturer

Arrival Time: 1:00 PM
Departure Time: 3:30 PM

Inspection Type:

☒ Unannounced Inspection

☐ Announced Inspection

OPENING CONFERENCE

☒ Credentials Presented

☒ CBI warning to facility provided

The following information was obtained verbally from facility personnel unless otherwise noted.

Process Description:

Continental Tire operates a rubber tire manufacturing facility that produces passenger/light truck and commercial vehicles tires (PLT and CVT respectively). Carbon black, natural and synthetic rubber, and various other components are mixed together in proportions dependent on desired tire properties. The facility operates 21 mixers, with mixers 19, 20, and 21 controlled by a baghouse and regenerative thermal oxidizer (RTO). The remaining mixers are controlled by baghouses and are uncontrolled for volatile organic compounds (VOCs). Upon leaving the mixers, the rubber sheets are sent through an extruder where they are heated and run through a "tuber" to mold the material into the desired shape. Rings of steel wire are coated in rubber and are used to form a tire outline, which is then wrapped in rubber strips from a smaller extruder. Components are then sent to a tire assembly room where automated machines assemble a base, plain tire referred to as a "green tire". Green tires are then sent to the curing process. Curing is where the tire is placed in a mold and baked into its final form. CVT tires are baked for 35-38 minutes, and PVT tires are baked for 8-10 mins. After curing, tires proceed through final finishing processes including buffing and trimming. Tires are next sent to a warehouse where they are then transported to various distributions centers via truck.

Staff Interview: When asked about emissions at mixing units, Mr. Cravens stated that the majority of the emissions are ethanol, which is produced as a side reaction when silanes react in silica rubber. Mr. Cravens noted that proposed Mixer 22 will primarily produce PLT and will be controlled by a new RTO. Mr. Mack explained that emissions from the mixers are evacuated through a direct side duct. An overhead duct is opened during times of mixer loading to route emissions to the respective control device. When asked whether the facility monitored facial velocity at mixers 19, 20, and 21, Mr. Mack noted that no such monitoring is performed as no issues have existed in the past during Method 204 performance tests. Mr. Mack noted that emissions during mixing are calculated using stack test data conducted at the facility. Facility staff also stated that demand is trending toward the need for increased production of synthetic rubber tires. The 2017 RTO stack test was performed to reflect normal operations with mixers 19-21 processing 72 percent synthetic rubber and 28 percent lower emission natural rubber batches, while all three mixers have the capacity to process synthetic rubber batches under a worst case scenario.

TOUR INFORMATION

EPA toured the facility: Yes

Photos and/or Videos: were taken during the inspection.
Attached as Appendix A

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

Requested documents:

- 2016 Curing room stack test
- 2017 Mixers 19-21 RTO stack test

SIGNATURES

Report Author: _____ Date: 12/12/17

Section Chief: _____ Date: 12/21/17

APPENDICES AND ATTACHMENTS

1. Appendix A: Photo/Video Log
- Documented in Appendix A and attached as external storage media

Contains Items Claimed as CBI – Non-Releasable
Facility Name: Continental Tire
Facility Location: 11525 N. Illinois Hwy 142, Mount Vernon, Illinois
Date of Inspection: December 04, 2017

CONFIDENTIAL BUSINESS INFORMATION ATTACHMENT

Facility Name: Continental Tire
Facility Location: 11525 N. Illinois Hwy 142, Mount Vernon, Illinois
Date of Inspection: December 04, 2017

1. **Inspector Name:** Dakota Prentice	2. **Date(s) of Inspection:** December 04, 2017
3. **Company/Facility Name:** Continental Tire	4. **Street Address, City, State:** 11525 N. Illinois Hwy 142, Mount Vernon, Illinois
5. **Number of Images:** 1	6. **Archival Record Location:** Attached external storage

File Number	File Name	Date and Time	Description of File
1	IMG_0519.JPG	12/04/2017, 2:58PM	Extruder #2

Facility Name: Continental Tire
Facility Location: 11525 N. Illinois Hwy 142, Mount Vernon, Illinois
Date of Inspection: December 04, 2017

APPENDIX A: DIGITAL IMAGE LOG

7. Inspector Name: Dakota Prentice	**8. Date(s) of Inspection:** December 04, 2017
9. Company/Facility Name: Continental Tire	**10. Street Address, City, State:** 11525 N. Illinois Hwy 142, Mount Vernon, Illinois
11. Number of Images: 2	**12. Archival Record Location:** Attached external storage

File Number	File Name	Date and Time	Description of File
1	IMG_0517.JPG	12/04/2017, 2:31PM	Mixer 20
2	MOV_1900.mp4	12/04/2017, 2:43PM	Mixer 21